

# **DISPLAY AND KEYPAD BACKLIGHT MANAGEMENT FOR PORTABLE ELECTRONIC DEVICES**

## **ABSTRACT OF THE INVENTION**

This invention is a portable electronic device (100) including a display (212),  
5 an input device (210), a lighting circuit (204), a light sensor (206) and a control circuit  
(208). The lighting circuit (204) includes a light source (214) to illuminate the  
display (212) and the input device (210). The light sensor (206) determines the  
ambient lighting conditions about the display (212) and/or the input device (210) and  
generates an ambient lighting signal based on the ambient lighting conditions. The  
10 control circuit (208) is coupled to the lighting circuit (204) and the light sensor (206)  
and has a delayed operation mode in which a first activation of the input device (210)  
illuminates the display (212) without performing any other operation of the device  
(100) and a second activation of the input device performs an operation of the device  
other than illuminating the display. The control circuit (208) of the portable  
15 electronic device (100) may receive a reverse bias signal generated by the lighting  
circuit (204) when incident with ambient lighting about the user interface (202) to  
supplement or eliminate the light sensor (206).